ABSTRACT OF THE DISCLOSURE

In a handover processing method of a mobile communication system, when a radio link set (active set update) message is received from a RNC (radio network controller), the method includes performing a backup of a present radio link set and changing the present radio link set according to the radio link set message; operating a timer when the radio link set is changed and transmitting a radio link set completion (active set update complete) message to the RNC; and reverting the changed radio link set back to the previous backed-up radio link set when a reply signal is not received from the RNC even though the operation time of the timer expires.